

IN THE CLAIMS:

Please cancel claims 9 and 24 without prejudice, and amend the claims as follows:

1. (Currently Amended) A method for ~~electro~~ plating a metal onto a substrate plating surface, comprising:

holding a substrate with the substrate plating surface face-up on a rotatable substrate support member having means for holding and rotating the substrate during an ~~electro~~ plating process;

~~positioning an anode above the substrate plating surface;~~

~~flowing an ~~electro~~ plating solution between the anode and onto the substrate plating surface; and~~

vibrating the substrate while flowing the plating solution onto the substrate plating surface.

~~applying a plating bias between the substrate plating surface and the anode to electroplate the metal onto the plating surface.~~

2. (Currently Amended) The method of claim 1 wherein the ~~step of~~ holding the substrate comprises providing a vacuum ~~suction~~ between the substrate support member and a ~~backside of~~ the substrate.

3. (Currently Amended) The method of claim 1, wherein the step of holding the substrate ~~further~~ comprises providing a peripheral seal between the substrate support member and a ~~backside of~~ the substrate.

4. (Currently Amended) The method of claim 1, ~~wherein applying a plating bias comprises positioning a cathode contact ring in electrical contact with the plating surface, the cathode contact ring defining a fluid processing volume between the ring and the substrate surface.~~ further comprising:

positioning an anode above the substrate plating surface and in electrical communication with the plating solution;

positioning a cathode contact ring in electrical contact with the plating surface, the cathode contact ring defining a fluid processing volume inside the ring and above the substrate surface; and

applying a plating bias between the substrate plating surface and the anode to electroplate the metal onto the plating surface.

5. (Currently Amended) The method of claim 4, wherein the cathode contact ring electrically contacts an annular portion of the periphery of the substrate ~~the plating surface annular ring and a plurality of contact pins extending radially inwardly therefrom,~~ and positioning an annular seal radially inward of the contact pins.

6. (Currently Amended) The method of claim 4 ~~4~~, wherein the ~~electro~~ plating solution flows through perforations in the anode.

7. (Currently Amended) The method of claim 4 ~~4~~, wherein the anode is consumed during the operation of the ~~electro~~ plating method.

8. (Currently Amended) The method of claim 1, further comprising rotating the substrate while flowing the ~~electro~~ plating solution ~~between the anode and~~ onto the substrate plating surface.

9. (Cancelled)

10. (Currently Amended) The method of claim 4, wherein flowing the ~~electro~~ plating solution ~~further~~ comprises filling the fluid processing volume.

11. (Currently Amended) The method of claim 10, wherein ~~the~~ positioning the anode ~~further~~ comprises positioning the anode in electrical communication with the fluid processing volume.

12. (Previously Presented) The method of claim 4, further comprising removing the cathode contact ring and rinsing the substrate plating surface with a rinse agent.

13. (Currently Amended) The method of claim 12, wherein the ~~step of~~ rinsing the substrate plating surface comprises spraying a rinse agent over the substrate plating surface while rotating the substrate support within.

14. (Previously Presented) The method of claim 12, further comprising draining the rinse agent back to a rinse agent reservoir.

15. (Previously Presented) The method of claim 12, further comprising purifying the rinse agent in a purifier.

16. (Previously Presented) The method of claim 12, further comprising spin-drying the substrate.

17. (Currently Amended) The method of claim 4 4, further comprising supplying the ~~electro~~ plating solution into a cavity ring disposed above the anode.

18. (Currently Amended) The method of claim 17, further comprising ~~moving~~ vibrating the cavity ring while flowing the ~~electro~~ plating solution.

19. (Currently Amended) A method for ~~electro~~ plating a metal onto a substrate plating surface, comprising:

- positioning the substrate plating surface face-up on a support member;
- positioning the support member at a first vertical position in a processing cell;
- ~~electrically contacting a cathode clamp ring to the substrate plating surface;~~
- flowing an ~~electro~~ a plating solution ~~from an anode to~~ onto the substrate plating surface while rotating the substrate plating surface at the first vertical position;

capturing the electroplating solution used in the plating process with a first fluid receiving member;

positioning the support member at a second vertical position in the cell, the second position being different from the first position; ~~and~~

rinsing the substrate plating surface with a rinse agent at the second vertical position; and

capturing the rinsing solution with a second fluid receiving member.

20. (Previously Presented) The method of claim 19, further comprising spin-drying the substrate plating surface.

21. (Currently Amended) The method of claim 19, further comprising draining the electro plating solution to a ~~an~~ electro plating solution reservoir.

22. (Previously Presented) The method of claim 19, further comprising draining the rinse agent to a rinse drain and purifying the rinse agent.

23. (Currently Amended) A method for plating and rinsing a substrate in a processing cell, comprising:

positioning the substrate face-up on a rotatable substrate support member and positioning the substrate support member at a plating position in the cell;

electrically contacting a plating surface of the substrate with a cathode electrode;

forming a fluid processing volume above the plating surface;

positioning an anode in electrical communication with the processing volume;

applying a plating bias between the anode and the cathode electrode to plate a metal from the fluid processing volume onto the plating surface in the plating position;

capturing a plating solution used in the plating process with a first fluid receiving member;

moving the substrate support member to a rinsing position; ~~and~~

dispensing a rinsing solution onto the plating surface while rotating the substrate;

and

capturing the rinsing solution with a second fluid receiving member.

24. (Cancelled)

25. (Currently Amended) The method of claim 23, wherein electrically contacting the plating surface comprises positioning a cathode contact ring having a plurality of radially positioned substrate contact pins positioned thereon such that the contact pins electrically engage an annular portion of the perimeter of the substrate.

26. (Previously Presented) The method of claim 25, further comprising sealably engaging the perimeter of the plating surface with an annular seal positioned radially inward of the contact pins.

27. (Previously Presented) The method of claim 23, further comprising flowing an electroplating solution through a plurality of perforations in the anode to fill the fluid processing volume.

28. (New) The method of claim 19, further comprising:

electrically contacting a cathode clamp ring to an annular portion of the periphery of the substrate plating surface; and applying a plating bias between the anode and the cathode clamp ring to plate a metal from the plating solution onto the substrate plating surface.